CHAPTER 5

RIGGING TOW WEAPON SYSTEM AND MISSILES IN AN A-22 CARGO BAG FOR LOW-VELOCITY AIRDROP

5-1. Description of Load

The TOW weapon system consists of the launcher, launch tube, and power pack. It can be rigged with eight missiles in an A-22 cargo bag for low-velocity airdrop. The load requires one G-12D cargo parachute or three

G-14 cargo parachutes.

5-2. Rigging A-22 Cargo Bag

Rig the TOW weapon system in the A-22 cargo bag as shown in Figures 5-1 through 5-8.

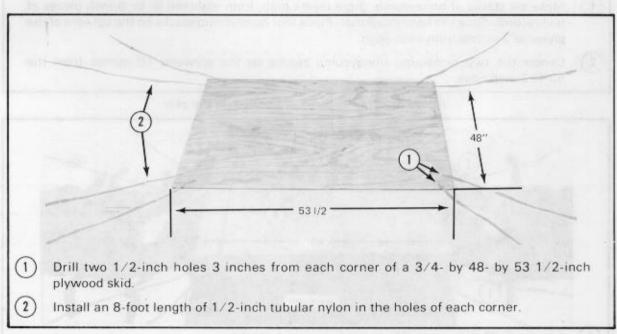
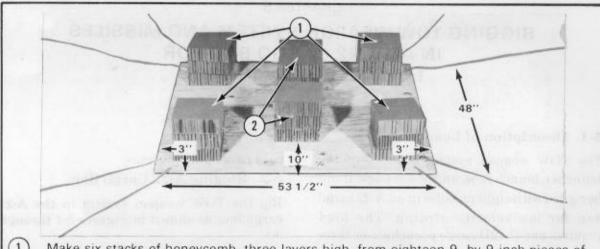


Figure 5-1. Skid prepared



- Make six stacks of honeycomb, three layers high, from eighteen 9- by 9-inch pieces of honeycomb. Glue the layers together. Place four honeycomb stacks on the corners of the plywood 3 inches from each edge.
- Center the two remaining honeycomb stacks on the plywood 10 inches from the 53 1/2-inch edge.

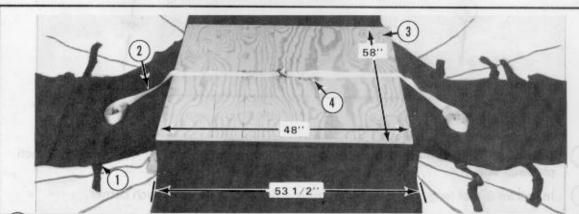
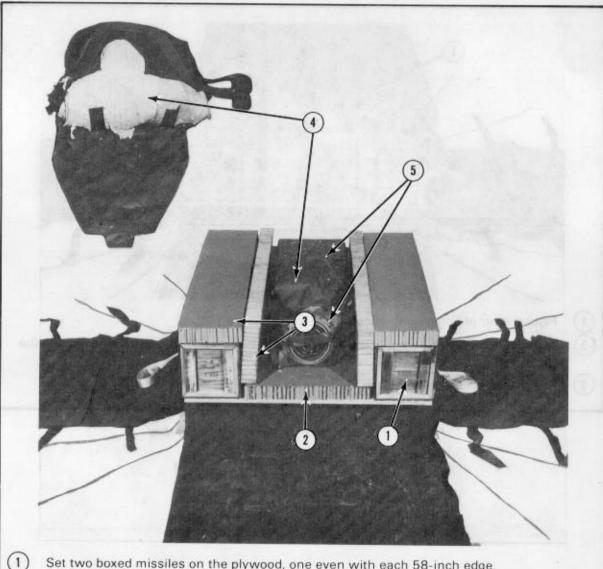


Figure 5-2. Honeycomb positioned on the skid

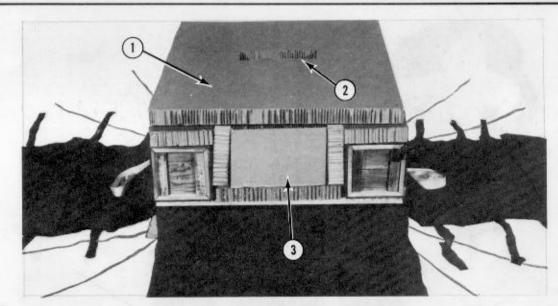
- (1) Lay the A-22 sling assembly on the honeycomb stacks.
- Center the A-22 cover, outside down, on the sling assembly, with the long panel over the long tiedown strap.
- 3 Lay a 3/4- by 48- by 58-inch piece of plywood on the A-22 cover. Position the 48-inch sides of this plywood to extend 5 inches over the 53 1/2-inch sides of the plywood skid under the honeycomb.
- Make a 30-foot tiedown strap as outlined in FM 10-500/TO 13C7-1-5, and lay it across the plywood.

Figure 5-3. A-22 cargo bag prepared for the TOW missile system



- Set two boxed missiles on the plywood, one even with each 58-inch edge.
- Lay a 24- by 58-inch piece of honeycomb between the missiles.
- Place a 12- by 58-inch piece of honeycomb on each boxed missile and one against the inside of each box.
- 4) Wrap the sight in cellulose wadding, and place it in its case, if available (insert above). Lay it on the honeycomb between the missiles.
- (5) Set the power pack and sight traversing unit on the honeycomb with the sight.

Figure 5-4. Missiles, sight traversing unit, sight, and power pack stowed



- 1) Place a layer of honeycomb on top of the load.
- Make a 6- by 18-inch cutout in the honeycomb to keep the honeycomb from touching the sight.
- 3) Place a piece of honeycomb, cut to fit, at each end of the equipment.

Figure 5-5. Honeycomb placed on top of the load

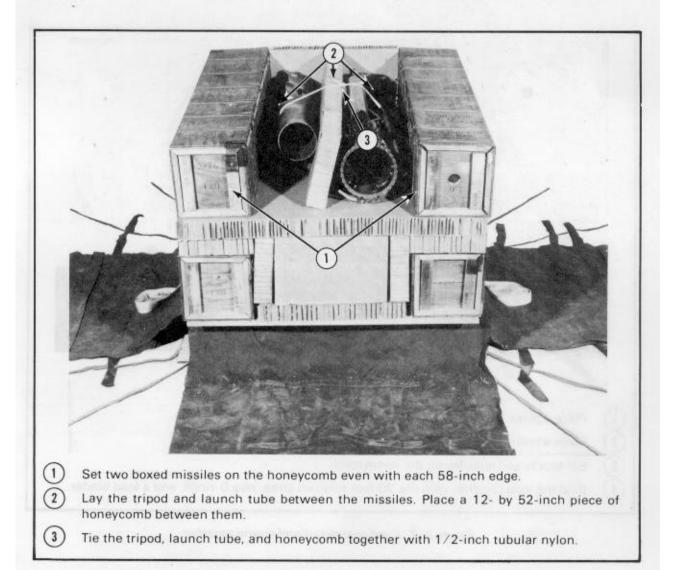


Figure 5-6. Missiles, tripod, and launch tube stowed

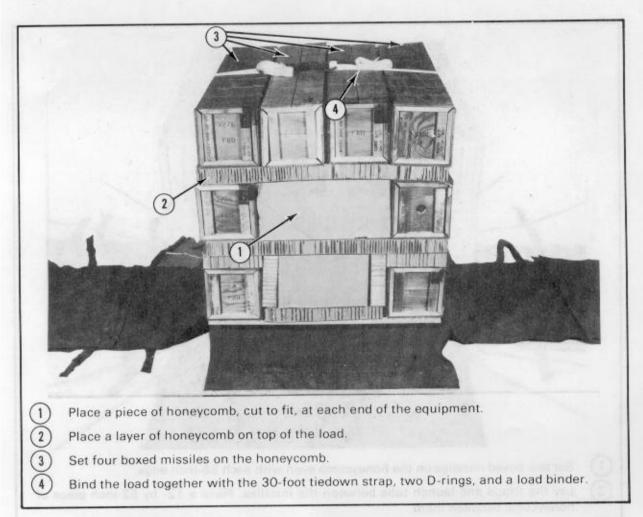
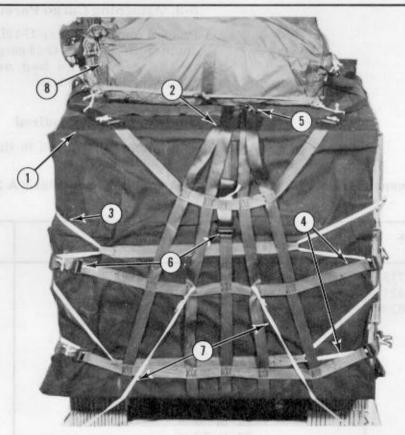


Figure 5-7. Load completed and bound together



- 1) Bring the A-22 cover up over the load, and fold excess material under as necessary.
- Pass the A-22 tiedown straps up over the load. Fasten and tighten the straps.
- 3 Lace each corner of the cover through the lacing loops with 1/2-inch tubular nylon to form a figure eight.
- Fasten the lateral straps together around the A-22 cover. Pass the upper lateral straps across the top of the corners.
- 5 Attach the suspension webs to the D-rings of the support webs with the open side of the snaps facing in. Tape the snaps to the D-rings.
- Adjust all straps to make the sling assembly fit snugly. Pull the suspension webs to their full height. Adjust the upper lateral straps to prevent binding the upper part of the support web. Fold all excess straps, and tape the folds or tie them with 80-pound cotton webbing.
- Tie the skid to the A-22 sling assembly with the previously attached 1/2-inch tubular nylon.
- Prepare, attach, and safety one G-12D cargo parachute (with a 68-inch cargo pilot parachute) or three G-13 or G-14 cargo parachutes to the load according to FM 10-501/TO 13C7-1-11.

Figure 5-8. TOW weapon system rigged in A-22 cargo bag

5-3. Attaching Cargo Parachutes

Prepare and attach one G-12D cargo parachute or three G-13 or G-14 cargo parachutes to the A-22 cargo bag according to FM 10-501/TO 13C7-1-11.

5-4. Equipment Required

The equipment required to rig this load is listed in Table 5-1.

Table 5-1. Equipment required to rig TOW weapon system and eight missiles in A-22 cargo bag

National Stock Number	ltem	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
1670-00-587-3421	Bag, cargo, aerial delivery, type A-22	1
1670-00-753-3928	Pad, energy-dissipating, honeycomb,	
	3- by 36- by 96-in:	3
	9- by 9-in	(18)
	12- by 18-in	(2)
	12- by 24-in	(2)
	12- by 52-in	(1)
	12- by 58-in	(4)
	22- by 48-in	(2)
	24- by 58-in	(1)
]	36- by 48-in	(2)
1670-00-893-2371	Parachute, cargo, 64-ft, G-12D (or three each,	
	G-13 cargo parachutes, NSN 1670-00-984-3535)	1
5530-00-128-4981	Plywood:	
	3/4- by 48- by 53 1/2-in	1 1
	3/4- by 48- by 58-in	1
7510-00-266-5016	Tape, adhesive, 2-in	As required
8310-00-917-3945	Thread, cotton, ticket number 5	As required
1670-00-937-0271	Tiedown assembly, 10,000-lb	2
8305-00-268-2411	Webbing, cotton, 80-lb	As required
8305-00-082-5752	Webbing, nylon, tubular, 1/2-in	As required